UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,483	02/12/2001	Donald Gordon	DIVA/006 DIV1	9109

26291	7590	04/19/2004	EXAMINER

MOSER, PATTERSON & SHERIDAN L.L.P.
595 SHREWSBURY AVE, STE 100
FIRST FLOOR
SHREWSBURY, NJ 07702

EXAMINER
HAILU, TADESSE

ART UNIT	PAPER NUMBER
2173	13

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-65* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-65* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____ .
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *12* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

1. This Office Action is in response to the Amendment entered 2/10/2004 for the

patent application (09/781,483) filed Feb 10, 2001.

2. The present patent application claims priority from provisional application

number 60/034,490, filed on Jan 13, 1997.

3. The submitted information Disclosure Statement with references is considered

and entered into the application file.

4. The pending claims 1-65 are examined as follows.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of
making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 7 to 39 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement. The claim(s) contains subject matter,

which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention. In claim 7 lines 6-7, "a title object in the

videotape of said guide page." Is not described in the specification. Appropriate

correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in a patent granted on an application for patent by another filed in
> the United States before the invention thereof by the applicant for patent, or on an international
> application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section
> 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6.   Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Killian

(US 6,163,316).

With regard to claims 1-6:

Killian discloses a JAVA-enabled television system that support JAVA applets or

applications and provide a wide variety of functionalities related to television

programming. Killian further describes logically linked applets (fig. 2, column 6, lines

19-31). Each of said applets functionality is associated with graphical, video and

control layers. Each applet functionality is hierarchically linked (column 6, lines 19-

column 7, lines 7). The JAVA-enabled television system also includes an electronic

programming guide (EPG) applet 70, wherein the electronic programming guide

includes user manipulability API interface (graphical and control layers). Killian also

discloses a video program (video layer) from a video program provider (column 6, lines

57-column 7, lines 32).

With regard to claim 2:

As per "...said graphical layer comprises a plurality of graphical objects, each of

said graphical objects being logically linked to a respective applet via said control layer."

(Killian, column 7, lines 8-48).

With regard to claim 3:

As per "...said linked applets are stored in provider equipment within an

interactive information distribution system and executed within subscriber equipment

within said interactive information distribution system;" (column 8, lines 36-56);

As per "said subscriber equipment generating in response thereto an image

representative signal which, when processed by a display device, results in the display

of: said graphics layer, for displaying one or more graphical objects, said graphical

objects being associated with respective applets stored in provider equipment, said

applets comprising menu information and associated image information; said video

layer, for displaying still or moving images, including still or moving images generated

using said applet image information; and said control layer, coupled to said graphics

layer and said video layer, for generating an applet request in response to a selection

of a graphical object." (Fig. 2, column 6, lines 19-31; column 6, lines 57-column 7, lines

32).

With regard to claim 4:

As per "... In an interactive information distribution system comprising provider equipment and subscriber equipment in communication via a network, a method comprising: transmitting, to said subscriber equipment from said provider equipment, a first, applet defining a graphical layer, a video layer and a control layer, said control layer logically linking a graphical layer object to a second applet stored in said provider equipment; and in response to subscriber interaction indicative of the selection of said graphical layer object, transmitting said second applet to said subscriber." (Fig. 2, column 6, lines 19-31; column 6, lines 57-column 7, lines 32).

With regard to claim 5:

As per "...said subscriber equipment receives and processes a single applet to provide, upon a display device, a graphical layer and a video layer, said control layer being responsive to user manipulation of graphical objects to select for download to said subscriber an applet associated with a selected. Graphical object." (Column 6, lines 32-column 7, lines 7).

With regard to claim 6:

As per "...said graphical layer includes at least one graphical object representative of said logically linked applets, said video layer provides a contextual anchor relating to said applets and

Said control layer operates to logically link said graphical objects to said other applets." (Fig. 2, column 6, lines 19-31).

7.   Claims 7-65 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis et al (US 5,822,123).

With regard to claim 7:

Davis discloses an electronic television program guide schedule system including a video overlay (Fig. 2), for displayed video images (e.g. Fig. 11) including schedule information, such as movie title; wherein the video image is transmitted data stream from a data provider (fig. 1, column 9, lines 7-20); and a graphics overlay (e.g. fig. 5), for displaying graphical objects on a screen (e.g. fig. 5, #51). The user can manipulate the cursor to highlight and select any particular show (column 17, lines 63-column 18, lines 5).

With regard to claim 8:

As per "... an opacity level of each overlay object is adjustable to visually emphasize or de-emphasize the associated title object." (column 17, lines 63-column 18, lines 5; column 20, lines 1-25).

With regard to claim 9:

As per "... a color of each overlay object is adjustable to visually emphasize or de-emphasize the associated title object." (column 17, lines 63-column 18, lines 5).

With regard to claim 10:

As per "... de-emphasized title objects are substantially hidden from view." (column 34, lines 20-23).

With regard to claim 11:

As per "... the overlay objects are selectively controlled to hide or reveal the associated title objects." (column 26, lines 34-44).

With regard to claim 12:

As per "... emphasized title objects are depicted as high intensity objects on the guide page and de-emphasized title objects are depicted as low intensity objects." (column 35, lines 50-column 36, lines 2).

With regard to claim 13:

As per "... an amount of de-emphasize for each title object is adjustable in discrete increments." (column 17, lines 63-column 18, lines 5).

With regard to claim 14:

As per "... at least one of the overlay objects in the graphics layer is a transparent overlay that does not visually alter the associated title object." (see fig. 45).

With regard to claim 15:

As per "... each overlay object in the graphics layer is implemented as a bar having a particular shape." (see figs. 43a-43i).

With regard to claim 16:

As per "... each overlay object in the graphics layer is implemented as horizontal bar." (see figs. 43a-43i).

With regard to claim 17:

As per "... each overlay object is associated with a particular x-y coordinate." (column 18, lines 11-28).

With regard to claim 18:

As per "... each title object in the video layer represents a program in a listing of programs." (figs. 18-20).

With regard to claim 19:

As per "... the listing of programs includes prior, current, or future time

programming, or a combination thereof." (figs. 18-20).

<u>With regard to claim 20</u>:

As per "... each title object is associated with a respective program for a

particular channel and time slot." (figs. 18-20).

<u>With regard to claim 21</u>:

As per "... title objects not associated with a desired time slot are masked by

controlling the associated overlay objects." (column 15, lines 52-column 16, lines 3).

<u>With regard to claim 22</u>:

As per "... each title object corresponds to a manipulability object within the video

layer." (see figs. 18-20).

<u>With regard to claim 23</u>:

As per "... the title objects in the video layer are visually emphasized or

de-emphasized in response to user manipulations via a remote control unit." (see figs.

18-20; column 15, lines 52-column 16, lines 3).

<u>With regard to claim 24</u>:

As per "... the overlay objects in the graphics layer are controlled locally at a set

top terminal." (column 11, lines 17-38).

<u>With regard to claim 25</u>:

As per "... the graphics layer is modified in response to a user command."

(column 15, lines 14-28).

<u>With regard to claim 26</u>:

As per "... the graphics layer is derived based in part on data received from the transmission source." (fig. 1; column 9, lines 7-20).

<u>With regard to claim 27:</u>

As per "... the graphics layer is generated at the transmission source and received via one or more streams." (fig. 1; column 9, lines 7-20).

<u>With regard to claim 28:</u>

As per "... the overlay objects are arranged in the graphics layer based on overlay parameters received from the transmission source." (fig. 39, column 32, lines 58-column 33, lines 3).

<u>With regard to claim 29:</u>

As per "... the graphics layer is generated locally at a set top terminal." (column 11, lines 17-38).

<u>With regard to claim 30:</u>

As per "... the graphics layer is generated using one or more bitmaps." (column 10, lines 51-67).

<u>With regard to claim 31:</u>

As per "... the one or more bitmaps are pre-programmed at a set top terminal." (column 10, lines 51-67, column 34, lines 20-56).

<u>With regard to claim 32:</u>

As per "... the one or more bitmaps are updatable at a set top terminal." (column 10, lines 51-67).

<u>With regard to claim 33:</u>

As per "... the one or more bitmaps are synchronized to the video layer via signaling sent via a data delivery means." (column 10, lines 51-67, column 34, lines 20-56).

With regard to claim 34:

As per "... the graphics layer includes an icon representative of a particular channel selected for processing." (figs. 18-20).

With regard to claim 35:

As per "... an emphasized title object can be selected to retrieve a video stream or an audio stream, or both, associated with the emphasized title object." (column 35, lines 50-column 36, lines 2).

With regard to claim 36:

As per "... an emphasized title object can be selected to change a level of abstraction, wherein each of a plurality of possible levels of abstraction defines a particular manner in which data is presented on the program guide page." (column 35, lines 50-column 36, lines 2).

With regard to claim 37:

As per "... the plurality of levels of abstraction include an interaction model that includes manipulations requiring no interaction with the transmission source." (column 5, lines 48-column 6, lines 13).

With regard to claim 38:

As per "... the plurality of levels of abstraction include an interface model that includes manipulations requiring interaction with the transmission source." (column 5, lines 48-column 6, lines 13).

With regard to claim 39:

As per "... the plurality of levels of abstraction include a contextual level indicative of replacement of the video layer in response to a user command." (column 15, lines 14-28).

With regard to claim 40:

Independent claim 40, while not necessary identical in scope, contains limitations similar to independent claim 7 and therefore is rejected under the same rationale.

With regard to claim 41:

As per "... the video layer includes title objects for a plurality of time slots, and wherein title objects corresponding to a selected time slot are revealed and title objects corresponding to remaining time slots are hidden from view." (figs. 18-20).

With regard to claim 42:

As per "... the video layer is divided into a plurality of regions including a guide region and a video region." (column 32, lines 58-column 33, lines 3).

With regard to claim 43:

As per ".... the plurality of regions further includes a program description region used to display program information for a particular program." (fig. 11, #111).

With regard to claim 44:

As per "... the guide region presents a listing of programs and is generated at the

transmission source." (column 32, lines 58-column 33, lines 3).

<u>With regard to claim 45:</u>

Independent claim 45, while not necessary identical in scope, contains limitations

similar to independent claim 7 and therefore is rejected under the same rationale.

<u>With regard to claim 46:</u>

As per "...the video layer further includes a plurality of icons representative of a

plurality of user selectable options." (fig. 6, column 20, lines 1-25).

<u>With regard to claim 47:</u>

As per "...the video layer further includes a program description region." (fig. 11,

#111)

<u>With regard to claim 48:</u>

As per "...a first set of one or more title objects in the guide region is emphasized

and a second set of one or more title objects in the guide region is de-emphasized."

(figs. 18-20).

<u>With regard to claim 49:</u>

As per "... the title objects in the guide region and the overlay objects in the

graphics layer are generated at a transmission source." (figs. 18-20, column 9, lines 7-

20).

<u>With regard to claim 50:</u>

As per "... the title objects in the guide region are generated at a transmission

source and the overlay objects in the graphics layer are generated locally at a set top

terminal." (column 11, lines 17-38).

With regard to claim 51:

Independent claim 51, while not necessary identical in scope, contains limitations

similar to independent claim 7 and therefore is rejected under the same rationale.

With regard to claim 52:

As per "... merging the video layer with the graphics layer to provide an output

video." (figs. 11-12).

With regard to claim 53:

As per "... the video and graphics layers are generated at the transmission

source." (fig. 1; column 9, lines 7-20).

With regard to claim 54:

As per "... the video layer is generated at the transmission source and the

graphics layer is generated locally at the set top terminal." (fig. 1; column 9, lines 7-20).

With regard to claim 55:

As per "... receiving a user command to change emphasis on one or more title

objects; and modifying the graphics layer in response to the user command." (see figs.

18-20; column 15, lines 52-column 16, lines 3).

With regard to claim 56:

As per "... receiving a user command selecting a particular title object; and

processing a stream associated with the particular title object to retrieve selected

information." (column 17, lines 63-column 18, lines 5).

With regard to claim 57:

As per "... receiving a command to change a level of abstraction; and changing

the level of abstraction in response to the received command, and wherein each of a

plurality of possible levels of abstraction defines a particular manner in which data is

presented on the IPG page." (column 17, lines 63-column 18, lines 5).

With regard to claim 58:

Independent claim 58, while not necessary identical in scope, contains

limitations similar to independent claim 7 and therefore is rejected under the same

rationale.

With regard to claim 59:

As per "... receiving a user command to emphasize or de-emphasize a particular

title object; and modifying the graphics layer in response to the user command."

(column 17, lines 63-column 18, lines 5).

With regard to claim 60:

As per "... the modifying is performed locally at a receiving device." (see figs. 18-

20; column 15, lines 52-column 16, lines 3).

With regard to claim 61:

As per "... receiving a user command for a particular selection (column 15, lines

14-28); and sending a request to the transmission source for additional data if the user

request cannot be processed based on available data at a set top terminal." (column 37, lines 9, 25).

With regard to claim 62:

Davis discloses a set top terminal (fig. 1, column 8, lines 66-columnn 9, lines 7) operative to provide an a program guide display, comprising: a demodulator (fig. 1, #13) operative to receive a modulated signal and provide a transport stream; a receiver (fig. 1, #12), operative to receive and process the transport stream to provide a plurality of data streams; a video decoder (fig. 1, #23), and operative to decode a first data stream to provide a video layer for the program guide display, wherein the video layer includes a plurality of title objects (fig. 18-20), and wherein each title object is associated with a respective channel and time slot in a program guide listing (figs. 18-20); an on-screen display (OSD) processor (figs. 18-20) operative to provide a graphics layer having included therein a plurality of overlay objects (figs. 18-20), wherein each overlay object is associated with a respective title object (figs. 18-20) in the video layer and is selectively controlled to visually emphasize or de-emphasize the associated title object (column 35, lines 50-column 36, lines 2); and a compositor coupled to the video decoder and the OSD processor (figs. 18-20) and operative to combine the video layer with the graphics layer to provide the program guide display (figs. 18-20).

With regard to claim 63:

As per "... a controller coupled to the OSD processor and operative to provide a signal used to provide the graphics layer." (figs. 1, 18-20).

With regard to claim 64:

As per "... the controller is operative to receive a user command and, in response, modifies the signal provided to the OSD processor." (fig. 1, column 15, lines 14-28).

With regard to claim 65:

As per "... the controller includes a storage element operative to store one or more bitmaps used to produce the graphics layers." (column 10, lines 51-67, column 34, lines 20-56).

Response to Arguments

8   Applicant's arguments filed 2/10/2004 have been fully considered but they are not persuasive.

The Applicant argues Killian reference fails to teach the feature of a plurality of logically linked applets, each of said applets defining <u>a graphical layer, a video layer, and a control layer</u>. In contrast to the applicant's argument Killian discloses the above claimed limitations. Killian describes integrating television signal (video) and Internet information, to provide interactive television programming. Killian further describes control Application Programming Interface (API) that includes classed that control video and audio properties associated with television, for example, and not by way of limitation: television (video) overlay operations, such as color overlay keying to overlay JAVA animations (graphical layer) setting channel numbers (control layer), etc., within an integrated display (column 6, lines 6-column 7, lines 7; column 7, lines 49-column 8, lines 35). Killian further describes one or more audio<u>/video overlays</u> 32 that are

coupled to platform 12 and coordinate the integration of television signals and Internet information in accordance with the operation of platform 12 (column 4, lines 20-54).

The Applicant also argues, "Nowhere in Killian reference is there any teach, or even suggestion, that the JAVA applets are logically linked applets. In contrast to applicant's argument as shown in FIG. 2, Killian describes running java applet and java application hierarchically (linked applet) (column 6, lines 6-31; column 7, lines 49- column 8, lines 4).

The applicant further argues that nowhere in the Davis reference is there any teaching, or even suggestion, that the data stream for the electronic program guide is a video stream, which includes a video layer comprising a plurality of title objects. In contrast to the applicant's argument Davis describes receiving data stream from a data providers, wherein data stream comprises television signal (video) broadcast information (column 9, lines 8-31; column 11, lines 1-17). As illustrated in several Figs. Such as, Figs. 11, 12, etc, Davis further discloses that the data stream includes a video layer comprising a plurality of title objects.

CONCLUSION

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the
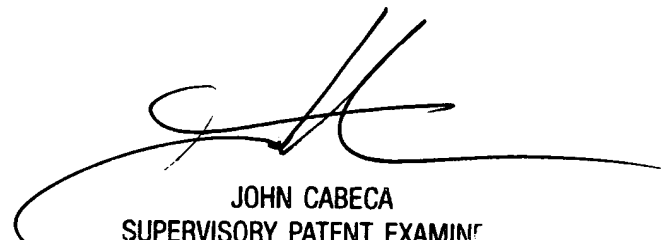
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (703) 306-2799. The Examiner can normally be reached on M-F from 10:00 - 8:30 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (703) 308-3116 Art Unit 2173 CPK 2-4A51.

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Tadesse Hailu

April 14, 2004

JOHN CABECA
SUPERVISORY PATENT EXAMINr
TECHNOLOGY CENTER 210C